

To Chairman Julius Genachowski and all FCC Commissioners,

I have made a number of filings with the FCC on why I think the AT&T Mobility T Mobil merger is a disaster for mobile users, for consumers and innovators and not just smaller competitors like Sprint Nextel which is lobbying against this deal itself because it will enable AT&T and Verizon to control 80% of the wireless market giving them near duopoly status. I have said if antitrust has any meaning left this deal must be rejected to stop the complete reconstitution of Ma Bell. Don't let them merge with Qualcomm either.

Here are some new reasons why to reject the merger. AT&T says it has to merge to get more spectrum because it lacks enough spectrum to provide better service (it brags to have the best service to consumers but tells the FCC its service can be better and indeed it can be if they invested more in their network something they have done less of since re-merging with SBC Communications & Bell South) but already has a lot of spectrum it just doesn't invest enough in its own network and wants to limit competition and consumer choice to control more of the market and put consumers at its mercy. They want to monopolize everything including wired and wireless services. AT&T seems to be a spectrum hog.

CNETNews

Sprint: What can you do with 4G?

Welcome, maneeshpanmy profile log out

Home

Reviews

You are here:News

Downloads

Video

Latest News

Webware

Crave

Business Tech

Green Tech

Wireless

Security

Blogs

Video

[Photos](#)

[More Menu](#)

[Home News Signal Strength](#)

[Signal Strength](#)

April 29, 2011 4:00 AM PDT

Is AT&T a wireless spectrum hog?

by Marguerite Reardon

[Font size](#)

[Print](#)

[E-mail](#)

[Share](#)

[41 comments](#)

AT&T is pinning its future on getting its hands on more wireless spectrum. But should regulators allow AT&T, which owns more wireless spectrum than any other wireless operator across the nation, to gobble up even more of this scarce resource?

That's the big question that the Federal Communications Commission is grappling with as it scrutinizes the planned merger between AT&T and T-Mobile, which will transfer all of T-Mobile's spectrum to AT&T. The FCC is also in the middle of considering AT&T's plan to buy spectrum in the lower part of the 700MHz band of spectrum from Qualcomm.

Wireless spectrum is like valuable real estate, and what's going on right now in the wireless market is akin to a good old fashioned land grab. The last major wireless auction for the 700MHz band of spectrum, which was considered beachfront property, was only a few years ago. Unfortunately, for wireless operators all the good "property" has already been bought. And until the FCC can free up more spectrum for auction, the only way for operators to get their hands on new spectrum is to buy it.

It's this desire for wireless "property" that is driving AT&T's \$39 billion acquisition of the struggling wireless operator T-Mobile USA. It's also why AT&T plans to spend nearly \$2 billion to acquire spectrum from Qualcomm, which the chipmaker used to build its failed mobile TV business called MediaFlo.

In its 381-page executive summary filed to the FCC last week (PDF) explaining why this megamerger, which will eliminate one of four nationwide U.S. carriers, is in the public interest, AT&T claims that without additional spectrum from T-Mobile, the carrier will not be able to fulfill short term needs for wireless broadband.

This is in spite of the fact that AT&T is today sitting on more spectrum than any other wireless operator in the top 21 markets in the U.S., and about a third of that spectrum is still being unused. "It's hard to reach the conclusion that the wireless carrier with the most spectrum and best spectrum

isn't able to serve its customers with what it already has," said Larry Krevor, a vice president of government affairs for Sprint. "Every carrier has to use its spectrum resources as efficiently as it can." AT&T's spectrum holdings

In the top 21 markets in the U.S., AT&T has about 284 MHz more spectrum than its closest competitor, Verizon Wireless, according to data provided by Verizon. To put this in context, the FCC's National Broadband Report calls for an additional 500 MHz of spectrum to be made available for auction in the next decade to fulfill the needs of all wireless broadband providers. The FCC has proposed TV broadcasters to give up about 120 MHz in incentive auctions for wireless broadband within the next five years.

In San Francisco, where it's been well-publicized that AT&T has struggled to keep up with mobile data demand for its smartphones, particularly the iPhone, AT&T has about 30 MHz more 3G spectrum than Verizon Wireless. This 3G spectrum consists of spectrum in both the 850MHz band as well as the PCS band of spectrum.

In other markets, the difference in spectrum holdings is not that great. For example, in Washington, D.C., another major city where AT&T customers have complained about dropped calls and slow data speeds on their 3G wireless devices, AT&T only has about 10 MHz more of 3G spectrum than Verizon Wireless. In New York City, the second largest wireless market, where AT&T customers probably suffer the most from dropped calls and slow connections, AT&T has a deficit of about 10 MHz less than Verizon Wireless.

And this is just the spectrum that AT&T is already using to provide its 2G and 3G wireless services. The company hasn't even touched about 832 MHz of new wireless spectrum in the top 21 markets. This spectrum, which sits in the AWS and 700MHz bands, will be used to build AT&T's 4G LTE network. The company is building the network and has plans to launch it commercially this summer with a target of reaching 70 million to 75 million potential subscribers by the end of this year.

Verizon Wireless, which is also building a 4G LTE network using the AWS and 700 MHz spectrum, has about 918 MHz of this spectrum in the top 21 markets. Verizon launched its 4G wireless service in December, and it expects to serve 200 million people with the service this year. And by the end of 2013 it will be available to more than 285 million potential customers.

The 700MHz spectrum that AT&T and Verizon Wireless are using to build their LTE networks was the last bit of spectrum to become available. It had originally been allocated as analog TV spectrum. It was given back to the government after TV broadcasters were forced to start transmitting signals digitally to make their spectrum use more efficient. It's considered prime real estate in terms of wireless spectrum because the low frequency means that it can send data longer distances and penetrate buildings more easily than spectrum at higher frequencies.

AT&T and Verizon currently own more than 90 percent of the licenses for this spectrum in major cities throughout the U.S. And AT&T is hoping to add to its 700MHz coffers by buying an additional 12 MHz of 700 MHz spectrum that Qualcomm is selling. Qualcomm had used the spectrum to build a nationwide mobile TV network called MediaFlo.

Earlier this week, consumer groups, rural operators, and Sprint Nextel, wrote letters to the FCC

asking the agency to reject Qualcomm's request to transfer the licenses to AT&T. They also said that if the FCC doesn't reject the proposal, they would at least like the agency to consider this spectrum license transfer along with the T-Mobile acquisition, since both transactions are fundamentally about increasing AT&T's spectrum holdings.

"Licenses for beachfront spectrum below 1 GHz are disproportionately held by two companies, AT&T and Verizon Wireless," representatives from Free Press, Media Access Project, Public Knowledge, Consumers Union, said in a letter to the FCC (PDF). "The proposed Qualcomm license transfer would only further this competitive disparity."

Spectrum is the 'lifeblood' of the wireless industry

There's no question that more spectrum means that wireless operators can serve more customers with faster, richer Internet services. In a recent speech to drum up support for incentive spectrum auctions that would bring more wireless spectrum to the market, FCC Chairman Julius Genachowski called it the "lifeblood of the wireless ecosystem."

He also said that "mobile broadband is being adopted faster than any computing platform in history, and could surpass all prior platforms in their potential to drive economic growth and opportunity." Indeed, smartphones have become more popular and consumers are using more data intensive applications, such as video streaming. Computing services are moving toward the "cloud," which is also increasing demand for wireless broadband. And it's true that wireless networks are starting to feel the strain.

But AT&T claims that it is feeling the wireless spectrum even more than its competitors.

In its filing last week to the FCC, AT&T says its network has more smartphones on it than any other wireless provider with a total of 31 million smartphone subscribers. The company highlighted that smartphones consume "24 times as much data as traditional cell phones."

AT&T says that as a result of the growth in smartphones and other connected devices, such as tablets, it has seen its data traffic grow 8,000 percent from 2007 to 2010. And that growth is expected to continue.

By 2015, AT&T estimates that mobile data traffic on its network will reach eight to ten times what it was in 2010. To put it another way, the company says that in just the first five to seven weeks of 2015, AT&T expects to carry all of the mobile traffic volume it carried during 2010.

"[The] spectrum crunch is hitting AT&T harder and sooner than the industry at large," it said in the filing. "And because AT&T plays a key role in supporting the cycle of mobile broadband innovation in the United States, its capacity problems could have ripple effects throughout the broadband ecosystem."

The loaded network is likely what's caused AT&T customers to already experience dropped calls and slow data service in certain markets, such as New York City and San Francisco. AT&T has admitted that it has struggled to keep up with demand in these cities, as well as certain other markets.

And it said that it's burning through spectrum at an accelerated rate trying to keep up with demand in certain markets.

"Whereas in 2004 it took 24 months in major markets to exhaust 10 MHz of spectrum," the company

said. "From 2008-2010 growing UMTS demand caused AT&T to burn through 10 MHz in half that time or less in some major markets."

Without additional spectrum, AT&T says that service problems will get worse in certain markets. The company says that it has tried to deal with the capacity crunch by adding more cell sites and using offload technologies such as Wi-Fi and femto cells, which create mini cell sites within people's offices or homes. But it says that these solutions are merely band-aids that don't address the real problem. The solution, according to AT&T is getting additional spectrum through its merger with T-Mobile USA. T-Mobile doesn't have any of the 700 MHz that AT&T may need to build its new LTE network, but it does have about 580 MHz of 3G spectrum in the top 21 markets, which AT&T could use to help alleviate some of its congestion on the existing 3G network in those markets. And it also has 580 MHz of AWS spectrum in these top markets, which AT&T could eventually use to expand its 4G LTE build out. In fact, AT&T claims that with the T-Mobile spectrum it could reach 97 percent of the population with its 4G network.

AT&T argues that T-Mobile is also capacity constrained when it comes to spectrum and can't afford to acquire new spectrum to sustain future growth. Therefore it makes sense for the two companies to combine "real estate."

"This transaction provides the most effective, efficient, and timely resolution of the capacity constraints facing AT&T and T-Mobile USA," AT&T writes.

Competitors say hold on a second

AT&T's competitors say the carrier is facing the same issues they each face. And they argue that if AT&T is truly struggling to keep up with demand, it may be because the company has not managed its resources well or invested enough in its network.

Look at Verizon Wireless as an example. Verizon, which has 104 million wireless connections on its network as of the end of the first quarter of 2011 compared with 97.5 million total wireless subscribers on AT&T's network, has on average about 10 MHz less spectrum in the top 21 U.S. markets than AT&T. And yet its service is often praised for its reliability.

"We have been building capacity into our network and investing in our network for several years," said Molly Feldman, vice president of business development for Verizon Wireless. "That's why we are in a strong position today."

Some critics question whether AT&T has invested enough in its network. Between 2008 and 2010, AT&T spent \$21.1 billion to upgrade its wireless network, according to an FCC filing. During that same period, Verizon spent about \$22.1 billion.

Martin Peers points out in a blog for The Wall Street Journal that even though AT&T already knew that it had congestion problems on its network after the introduction of the iPhone in 2007, it still only increased wireless capital expenditures by 1 percent in 2009 compared with an increase in capital spending from Verizon Wireless by about 10 percent.

Meanwhile, Verizon executives say the company has enough spectrum until at least 2015 to keep up with demands on its network. And like AT&T, Verizon now offers the data hungry Apple iPhone and iPad 2 along with several models of Google Android smartphones.

"The bottom line here is that this is about managing the network," Sprint's Krevor said. "I've got to give Verizon credit. They have a little bit less spectrum in some markets than AT&T and more subscribers than AT&T overall. And they don't have these same issues. They've done a better job of managing their network."

Krevor went on to say that AT&T has no one else to blame but itself for the dilemma it faces now.

"If AT&T has a spectrum use issue, it's one of its own making," he said. "They haven't managed their network effectively, so they think the solution is to simply acquire the nearest competitor."

Krevor said that every wireless operator would love to add more spectrum to its network to increase network capacity as it grows. But he said that isn't always possible given the that spectrum is a finite resources. And instead of allowing AT&T to eliminate a competitor, he believes the market will force AT&T and other wireless operators to use their spectrum more efficiently.

"Competition forces you to improve and invest in the network to make the services as good as they can be," he said. "We (Sprint Nextel) didn't do a great job of integrating the Nextel spectrum into our network, and the market punished us. We responded by fixing those issues. Why shouldn't AT&T do the same?"

Marguerite Reardon

Full ProfileE-mail Marguerite Reardon

Marguerite Reardon has been a CNET News reporter since 2004, covering cell phone services, broadband, citywide Wi-Fi, the Net neutrality debate, as well as the ongoing consolidation of the phone companies.

Topics:

Wireless,

Corporate and legal

Tags:

T-Mobile,

spectrum. 700 MHz,

4G LTE,

spectrum crunch,

AT&T,

Qualcomm,

Verizon Wireless,

merger,

FCC

Share:

Digg

Del.icio.us

Reddit

Facebook

Twitter

Recent posts from Signal Strength

Is AT&T a wireless spectrum hog?

RIM cuts expectations amid weak BlackBerry sales

Sprint feels some iPhone pain, but improves overall

Apple: We'll fix iPhone tracking 'bug'

T-Mobile suspends Facebook 'chat' service

Ask Maggie: iPhone 5 rumors and iPhone-tracking woes

Google launches Groupon competitor in Oregon

Lawmakers demand answers from Apple on iPhone tracking

Related

Digging through AT&T's FCC filing

Divestiture: When your carrier leaves you (FAQ)

FCC begins review of AT&T's T-Mobile deal

AT&T files merger papers with FCC

Ask Maggie: Will AT&T ax T-Mobile phones?

White House pushes for incentive spectrum auctions

Ask Maggie: AT&T to cut T-Mobile Wi-Fi call feature?

LightSquared: The answer to U.S. wireless competition?

ADD A COMMENT(Log in or register)

(41 Comments)

by gerrrg April 29, 2011 4:22 AM PDT

AT&T and T-Mobile already have roaming agreements; this isn't about spectrum, but about cutting operating costs to increase profit growth. If T-Mobile were constrained by limited bandwidth, it most certainly didn't stop them from trying to build its HSPA+ "4G" networks faster than AT&T, now did it?

Like thisReply to this comment

2 people like this comment

by neutral44 April 29, 2011 6:13 AM PDT

Spectrum? Damn near killed em!

Like this

2 people like this comment

by Vartra April 29, 2011 11:02 AM PDT

That is a falsehood, AT&T and T-Mobile rolled out HSPA+ at about the same time. T-Mobile just rebranded it to 4G first, AT&T was keeping it for laptop connect devices to try to control network crunch.

Like this

by sam999999999 April 29, 2011 11:26 AM PDT

Gerrrg's exactly right--there's no net gain in spectrum. T-Mobile's spectrum is already filled with T-Mobile subscribers. The spectrum doesn't magically become empty if ATT buys it.

This merger is all about reducing competition, and eliminating a lower cost competitor from the marketplace. That way, ATT will be more free to do things like force people into buying expensive data plans and messaging packages rather than paying a la carte. A monopolist gets to price along the demand curve, rather than according to costs.

If we had a government that represented consumers rather than corporations this merger would have been shot down months ago.

Like this

2 people like this comment

by kanic121 April 29, 2011 4:37 AM PDT

Is ATT less efficient in their use of spectrum, or do they just have many more customers than Verizon, or are they stashing away frequencies because they can? Wireless is changing so fast that if ATT really has poor spectrum use that can be corrected in time. If it's sheer customer numbers or their customers use more (perhaps simultaneous voice and data) then they need a longer term solution than to continue to buy frequencies. If they are stashing it, preventing competition then that's not something that should be done with frequencies used for the public good.

Like thisReply to this comment

2 people like this comment

by sharmajunior April 29, 2011 4:43 AM PDT

AT&T will have more customers once its acquisition of T-Mobile is complete. Right now they are #2 to Verizon.

IMO, AT&T should come up with a WiFi calling service like t-Mobile so that more customers can connect using their home network and not hog up theirs all the time.

Like this

3 people like this comment

by worried1 April 29, 2011 5:10 AM PDT

kanic121 step into the present; Verizon Wireless has more customers and gets better customer satisfaction ratings. AT&T needs to be more efficient in the use of their spectrum.

Like this

5 people like this comment

by neutral44 April 29, 2011 6:17 AM PDT

I live in New Orleans and during Mardi Gras, Super Bowl Parades, Halloween and other particularly crowded events ATT DOES NOT WORK. At all. I saw a map that shows tower locations for various providers. Verizon is everywhere, Sprint has a good amount, T-Mobile has a few in odd places and ATT has 2-3 no where near the dense areas of the city.

Does spectrum matter if you have nothing to support said spectrum? ATTs problem isn't bandwidth or

frequencies. It's the fact that they have no sources to connect to the network.

Like this

1 person likes this comment

by Vartra April 29, 2011 11:07 AM PDT

Neutral44 : where and how often a carrier can build tower is up to local regulators. If AT&T has as few towers in such a densely populated area, where they were the first on the scene offering emergency connection services after an emergency, and others have more towers, then should look into local regulators.

Like this

by neutral44 April 29, 2011 1:04 PM PDT

Varta: Huh?

Not quite clear in what you're saying. To add detail, when I looked at a map Verizon and Sprint had towers that covered the downtown metro area, uptown neighborhoods and the popular and crowded suburban areas. ATT had its towers located in an entire different section of town that almost nobody lives in, miles away from downtown and in the complete opposite direction of the suburban area.

Like this

by lamorpa April 29, 2011 5:35 AM PDT

What an idiotic graph. There is no relevance to having frequency as the vertical axis.

Like thisReply to this comment

by Maggie Reardon April 29, 2011 6:03 AM PDT

It's not the frequency but the amount of spectrum that they have specific frequency bands.

Like this

6 people like this comment

by eswinson April 29, 2011 8:59 AM PDT

The lower the frequency the greater the coverage. Building out in the 700 -800 Mhz range requires less towers. The downside of having less towers means you have to have more bands or channels to support more customers on less equipment. T-mobile on their frequency can actually cover a city the size of New York with 1/3 the amount of cell sites that AT&T would require with theirs.

Like this

by satchev April 29, 2011 5:37 AM PDT

sharmajunior wrote:

"IMO, AT&T should come up with a WiFi calling service like t-Mobile so that more customers can connect using their home network and not hog up theirs all the time."

This requires hardware to support it. TMO currently does not have new hardware that supports this functionality. TMO announced the sunset of their Wi-Fi calling feature/functionality a couple years ago.

Microcells make more logical sense as there is no new/specific hardware required in the phone to make it work.

Like thisReply to this comment

by ewsachse April 29, 2011 6:48 AM PDT

Wrong. All Microcells do is offload the traffic from their cellular network to your ISP's network. Why should AT&T (or any other cell provider) clog up the internet because they have a substandard cellular network. They want you to pay for these Microcells so they can use your ISP that you pay for.

That is what we call a "chump" in my world.

If they cannot provide the service with their equipment, then it is time to drop them for company that can provide service.

Like this

1 person likes this comment

by Vartra April 29, 2011 11:20 AM PDT

One point about microcells, the phone must broadcast on the frequency the microcell is listening on for it to work, thus why most carriers that carry them only offer for one specific generation of service, 3G in most cases.

While I do believe Wi-Fi calling is something that should be available on all cell phones, even the most basic feature phone, it is available on some AT&T smartphones as apps downloaded through their application markets. I know of several such applications for both Android and iPhone, as well as Blackberry, I don't know about WinMo7, or any other OS though. I use one most of the time on my iPhone when at home because I live out in the country with low coverage due to the geography.

Like this

by dagraham0 April 29, 2011 11:27 AM PDT

@ewsachse I would guess that AT&T, Verizon and any other mobile carrier would love to offload some of its traffic on to the wired network, especially if they didn't own it. Use the cable companies' bandwidth and charge customers to have better service in their area? Seems like a no-brainer for them.

It does seem like a mutual agreement between the ISP's and wireless companies would help. Wireless companies pay for some bandwidth on the ISP's wired networks that are more able to handle the data requirements, and everyone would seemingly "win". ISP's revenues go up, wireless providers provide better service and customers get their wireless data needs met reliably.

Of course, this is a pipe dream. But hey, it would be nice.

Like this

by dylert April 29, 2011 12:11 PM PDT

Microcells suck, I had one and the other party could only hear me about half the time, wifi calling would be a much better solution.

Like this

by John_Smith13579 April 29, 2011 12:39 PM PDT

WRONG!!

Femtocell DO require new hardware. It is a little box that plugs into your network... wired only. First it verifies the location of the femtocell via GPS, connects back home across the internet, and then starts broadcasting a 3G signal which your phone can pick up. It is basically a small cell tower that uses your ISP as a back-haul. Why the GPS? Well... since they are only licensed for X Bands in Y Area, they have to verify you are in an area where they are licensed to broadcast that signal.

All UMA requires is the carrier to put in UMA controllers on their end. Then you connect your phone to an access point and to the internet.

The difference between UMA and a standard connection is instead of a cell tower you have connected to an access point, and instead of the provider's back-haul network you have used the internet. Instead of landing on and being associated to a tower radio or mux, you are pinned to a UMA controller.

Sprint and Verizon are big on Femtocells because UMA is a GSM-only system. However there are many GSM-capable phones that Sprint and Verizon sell, so they could deploy it.

AT&T will never do it because they sell cellular phones and cellular phones connect to cell towers. Period.

In the end, AT&T will destroy the cell phone industry if they are allowed more control over it.

I bet a lot of people here are too young to remember when AT&T owned the entire phone network in this country. Remember when they charged for "tone-dialing" instead of pulse? Why'd they do that? Because they can, and there's nothing you can do about it.

In 3 years when 130mil people can't make phone calls, AT&T will just crank up the prices. Why? Because they can and there's not a damn thing you can do about it.

Like this

by Goodbye Helicopter April 29, 2011 5:40 AM PDT

All the spectrum does is give you more ranges in which to have handset radios working. Has very little effect on handling more customers.

These frequencies are the "bands" you used to see as dual/tri/quad-band handsets' promotional info.

This is just a FUD story.

CDMA works quite differently from GSM and most CDMA networks have fewer spectrum ranges in use.

Like thisReply to this comment

by texaslabrat April 29, 2011 10:24 AM PDT

"All the spectrum does is give you more ranges in which to have handset radios working"

Exactly. Each slice of bandwidth, ie "spectrum" supports a given number of simultaneous calls/data transactions. Ergo...more spectrum = more simultaneous calls/data transactions = supports more customers. The bands in which a handset can work is a min and max frequency. The carriers are doled out subsets of these frequency ranges for their use in each market. The bigger the subset, the more calls they can handle in that market all else being equal. The article's main point is spot-on, despite your assertions otherwise ;)

And by the way, just FYI, GSM's 3G and 4G technologies are CDMA-based. Only the "legacy" voice/2G portion of GSM is TDMA-based.

Like this

by jacomo April 29, 2011 6:05 AM PDT

AT&T issue is what to give up to the FCC/FTC in exchange for acquiring T-Mobile.

T-Mobile old Network is based on their 1900MHz Spectrum (2 & some 3G)-Largest 1900 MHz Network USA.

T-Mobile new 4G network is based on their Nationwide AWS-1 spectrum (1700 & 2100MHz) and is very popular (low cost) & successful YTD.

AT&T claims to need both T-Mobile AWS-1 Spectrum and their Tower space in key markets in order to build out their Nationwide LTE (4G) network.

So, the issues here are:

- Does AT&T force T-Mobile to abandon their successful 4G Network and give AT&T all their AWS-1 spectrum to deploy a new LTE 4G Network combined with AT&T 700MHz spectrum.

- What does AT&T do with its existing GSM 3G/4G Network based on their 1900MHz spectrum providing both Voice & Data services today nationwide?

- What does AT&T do with T-Mobile large 1900MHz spectrum pool as well as AT&T own 850Mhz Spectrum?

- Should FCC/FTC allow AT&T to acquire Qualcomms nationwide 700MHz pool?

Where does FCC/FTC focus ?

Jim A.

Like thisReply to this comment

by Vartra April 29, 2011 11:09 AM PDT

AT&T's 4G is based on the AWS-1, when it rolls out next year. It is not based on the 1900Mhz, that is their 3G service and is completely unaffected by the roll out of 4G when it happens.

Like this

by james_savik April 29, 2011 6:41 AM PDT

Snort!

Like thisReply to this comment

by SteveChicago April 29, 2011 8:17 AM PDT

Crazy idea here, but wouldn't it be nice if all companies used all the spectrum. Then the "providers" brought service from the towers to the backend.

Imagine if all the towers and spectrum in the country were managed by a single, non-profit entity and then the providers would tap into this network to provide service from there. Every tower would provide wireless in 700, 1700-2100 bands. The provider would then install gear to connect their customers to the backhaul and provide the actual service be it voice or broadband.

The same could be said for FttH and the CO. The wire is managed by the non-profit, but the backhaul is provided by a company.

This will never work cause it would level the playing field and cause real competition.

Like thisReply to this comment

2 people like this comment

by Renegade Knight April 29, 2011 9:21 AM PDT

I have a lot of merit though. Treat the towers as a non profit (or heck a for profit) publicly regulated utility. When the carriers hit a wall only one company needs to upgrade. Costs can be spread uniformly for every network (and not one time for each different network).

There is potential here. The fly in the ointment is that the tower owners would have to aggregate their assets and "ask" for this, or have it forced on them. It's the kind of thing that we should have figured out at the start. It's a lot easier when it's all new and nothing has been done yet.

Like this

by johnny raindrop April 29, 2011 10:26 AM PDT

I've wondered same thing. There are too many areas with low population and no coverage, including inside some national parks and miles of US highways. Public policy should be to cover everywhere with service. Instead we get two companies building incompatible towers in the same place. I think towers are a classic public utility.

Like this

by gareon54 April 29, 2011 8:47 AM PDT

It's really a moot point. We aren't running out of bandwidth. If you go overseas you will find download speeds in large metropolitan areas (Tokyo, Seoul, etc) much faster than we have. Poor business decisions by AT&T and Verizon have put us where we are. Their business model is spend as little as possible to make you happy and charge as much as they can for it.

Like thisReply to this comment

4 people like this comment

by phillipnicew April 29, 2011 12:03 PM PDT

I definitely would not couple AT&T with Verizon in that assessment.

Like this

by Robert B Davis April 29, 2011 9:52 AM PDT

The idea of using Wi-Fi is the correct thing to do. It's about using your resources smartly. But I believe about a week ago cnet reported that AT&T was thinking about dropping the Wi-Fi option T-Mobile costumers have after they buy that company. How stupid is that? That is why I'll never have AT&T as my carrier. They're just not that smart.

Like thisReply to this comment

by Vartra April 29, 2011 11:16 AM PDT

CNet reported they didnt know if they would or not, but looking around I see T-Mobile reported a while ago they were shutting that service down themselves, well before the news about the merger was announced.

Like this

by John_Smith13579 April 29, 2011 12:10 PM PDT

T-Mobile is not shutting down UMA capabilities. For a period of time their phones could only connect through wifi using a T-Mobile hotspot called T@home or something like that.

Now, you can use any UMA-capable phone to connect to any compatible access point and have your voice traffic traverse that instead of a tower.

This technology is quite simple. Rather than your phone registering to a tower, it will register via wifi. The technology is highly secure.

First your phone connects to an access point, verifies it can talk to the internet, etc... then it initiates an encrypted session back home to the provider using IPSec. Once the phone connects, it is authenticated using your SIM and the same registration data as when you're connected to a tower.

Once your traffic lands on the network, you are registered to a UMA controller which routes your calls appropriately.

While this technology is fairly simple, it does require GSM to work. This is why Verizon and Sprint use

Femtocell.

But... Verizon and Sprint also offer CDMA+GSM phones. It would seem really simple for Sprint to build UMA capability for their Dual-band/quad-band phones.

If anyone were to add it, it would be Sprint, I would think. It's really a pretty simple thing to do, relatively speaking.

You need an internet head-in point, a UMA controller which authenticates and accounts to the same back-end source as when you connect to towers.

Now the reason AT&T will never do this is because they are a horrible company, run by horrible people who are horribly incompetent. They are like the Tim Allen's of the phone world. Their only solution to any problem is "needs more power". Instead of strategically using all the resources available to them, or using resources in a different way, the only thing that registers to them is "more towers, more megahertz".

For example, every iPhone owner I know has wifi at home. If they were allowed to make UMA calls, AT&T's network wouldn't be so congested. But to AT&T that is just nonsense. These are cell phones and cell phones connect to cell towers. They just need more towers and more megahertz. That's how they do it because that's how they've always done it.

Once AT&T takes over, everything will be dumbed down to the level they "understand". This will always be in terms of cell towers, megahertz, and backhaul capacity.

Innovation will suffer because they own all the spectrum. They control all the towers, and they say how things are done.

AT&T's problems will not be solved by buying T-Mobile. Hell, their problems wouldn't be solved if they owned every available frequency. If they did own every single frequency available, they would just make horrible and inefficient use out of it. All of AT&T's problems exist inside AT&T. The only way to solve the problem is to kill off Ma Bell once and for all, and make sure it can never rise again.

Bottom line is, the more power AT&T has, the more likely your phone will crave Brawndo.
Like this

by Maerzie April 29, 2011 10:07 AM PDT

"AT&T's competitors say the carrier is facing the same issues they each face."

Well, BooHoo! Put up or shut up! Compete with them in buying T-Mobile for a bigger price! That's not

too hard to figure out. We have far too many poor quality cell phone companies anyway. Push the wimps off the map and make the remainder BETTER!

Like thisReply to this comment

1 person likes this comment

by Christopher Blair April 29, 2011 10:26 AM PDT

1. Cellular is a one-way technology, so no matter how much spectrum they have they will still have delivery bottlenecks, unless...
2. Unless cellular builds in a broadcast component, which they plan to do. Gee, sounds a lot like what TV broadcasters can already do, using a point-to-multipoint system.
3. Maybe a better idea would be to allow broadcasters experimental waivers to deploy an architecture utilizing a hybrid cellular/broadcast system.
4. Broadcasters would pay an annual 5% ancillary revenue fee to the Treasury, the gift that keeps on giving, while still providing free OTA television. No need for auctions and high-speed wireless broadband is available cheaper and faster than any other approach (to both urban and rural areas).

Like thisReply to this comment

by NoHarm2Any April 29, 2011 11:00 AM PDT

It is obvious that a largest wireless carrier Verizon can manage the available spectrum even with the unlimited data plan while ATT cannot. ATT is telling itself the problem. So, adding more spectrum by eliminating the competition while moving forward with poor and inefficient management will give ATT a justifiable base for purchasing T-mobile? How can they call themselves innovating when they can't even handle the larger spectrum with lower subscriber (comparing with Verizon)?

This truly shows their intention to eliminate the competition and grab the share of the multi-billion industry. How about the options for the consumers of having more GSM carriers? We are talking about the carrier with GSM having the national spectrum beside ATT and T-mobile. May be it might help ATT to grow and grab the big pie out of the market. But in terms of service, selection and competition, they seem to be more reluctant than innovating. While it is true that a company is aiming to buy T-mobile because that is what is its best interest at but not from a view of competition and consumer perspective.

Remember competition is one of the main gateways to innovation, so eliminating competition is most likely eliminating innovation and adding the new cell towers doesn't mean innovation. Hopefully, DOJ would understand this and make a wise decision.

Like thisReply to this comment

by Vartra April 29, 2011 11:15 AM PDT

your assumption falls false, verizon is not handling the same traffic load at&t is. Verizon Smartphone users < AT&T Smartphone users, average smartphone uses 24 times the data of a feature phone. Yes, I know you will counter with "but Android users use more data than iPhone" and once again you'd be looking at the wrong numbers, you're talking about 50-75 more MB a month per user, with

the total Verizon Android user count still being lower than AT&T iPhone user count (last I saw the numbers, if I'm wrong, show me and I'll correct myself, if you can't show, you don't know). So even with that marginally higher usage per user, it still is below AT&T's total smartphone usage.

Like this

by mogley2005 April 29, 2011 11:11 AM PDT

Does more spectrum equal better service?

Like thisReply to this comment

by John_Smith13579 April 29, 2011 12:56 PM PDT

Only if you horribly manage the spectrum you have.

AT&T is a horrible company that does everything in the most retarded way possible.

They view the world in 2-dimensional terms. The only way they see to solve any wireless problem is more towers and more spectrum.

As an example, I was working on a network design for a customer and they had 100 access points deployed. The users complained about slowness, so their solution was to add more APs. They were blasting so much signal in so many directions and they couldn't figure out why the users were having problems. Well.. the real problem was their horrible network the APs landed on. It was terribly inefficient and way too congested.

The solution wasn't that they lacked adequate coverage. It was that they lacked good infrastructure.

What AT&T is doing is what I've seen a lot of incompetent network people do. They are buying time.

Another example of a customer that had a horrible network manager. They had bandwidth problems and couldn't solve them. The solution was to rip out the 3 year-old network and upgrade it to a Gigabit Brocade network with a 10Gb backbone. Since the guy clearly had zero clue what he was doing, this "solution" would have bought him a year or so to get his new network online.

It took a week of digging and I found the problem was spanning-tree loops in an area of his network. He decided he wanted all his links online in a place and turned off spanning-tree. His view was Spanning-tree was disabling his links and wasting money and fiber, the solution was to disable spanning tree. Well... once we turned it back on, the loops stopped and the users were really happy. He ended up getting fired because he had to pay \$20K to someone else to solve a problem he caused. They credited us with saving them \$1mil.

What's the moral of the story? Stupid people do stupid things, and stupid people will never learn how stupid they are.

Like this

by qubius April 29, 2011 11:37 AM PDT

Chairman Reed E. Hundt ,

"In the long and tragic history of inequality between races and gender in America, today we are creating the greatest single opportunity ever made fairly available to small businesses, women and minorities. For the first time in our nation's history, the federal government is creating opportunities in a new industry in which all Americans will have a fair chance to compete from day one".

"entrepreneurs' C Block" is established, which is designed to fulfill the statutory mandate to ensure that small businesses, rural telephone companies and businesses owned by minorities and /or women (referred to as "designated entities") have the opportunity to participate in providing broadband PCS.

C & F "Entrepreneurs" Block Auctions.

Congress required the Commission to "promote economic opportunity and competition and ensure that new and innovative technologies are readily accessible to the American people by avoiding excessive concentration of licenses and by disseminating licenses among a wide variety of applicants, including small business, rural telephone companies, and businesses owned by members of minority groups and women."

Designated Entities

The FCC determined that setting aside certain blocks solely for bidding by designated entities for each auction might be necessary to ensure their opportunity to acquire licenses. For the broadband PCS auction, the FCC found that set-asides would be necessary for designated entities due to the ability of large competitors with extensive financial capabilities to outbid those without sufficient access to capital. Blocks C and F were set aside as the "entrepreneurs' PCS spectrum licenses ."

AT&T & T- Mobile

In 1995 AT&T ("Humpty Dumpty") was not allowed to bid on the C & F "entrepreneurs" blocks licenses auction No.5 and for good reason the auction was set aside for small business only. If the FCC allows this proposed merger request between Humpty Dumpty and T-Mobile Humpty Dumpty will end up owning over 95% of all the original C & F Block "entrepreneurs" blocks spectrum licenses that was set aside for by the Commission and Congress for small business only. "It's an outrage that this proposed merger request is even being considered by the commission. The FCC "entrepreneurs" designated entities auction's and it's auction rules was a monumental failure from day one. Approving this proposed merger request between Humpty Dumpty and T-Mobile would be appalling and would be virtually nailing the last nail in the coffins of small business, the life blood of America. Small business was the ones that started the whole cell phone business and now you want cut off any real opportunity for small business to compete in the wireless market. And to made a bad situation worse Humpty Dumpty is asking the FCC not to mandate interoperability so that small carriers can have

access to new 4G network equipment, phones and devices that are able to work on the various 700MHz spectrum bands as well as having voice & data roaming at fair prices which Humpty Dumpty claim is extremely complicated and not possible. This kind of practice by a company dominating the wireless business is abusive behavior and must be viewed as anti-competitive. What happen to the Antitrust Laws in this country did it go the way of the Glass Steagall Act ? Bailing out AIG only cost the tax payers \$700 billion. The bottom line is no interoperability in the 700MHz. spectrum band then no merger. Humpty Dumpty can not have it's cake, and eat it to. Humpty Dumpty was not allowed to bid on the C & F "entrepreneurs" blocks licenses back in 1995 so why should the FCC allow them to own and control 95% of all the small business PCS spectrum licenses now. The FCC should mandate Humpty Dumpty to divest of all C & F blocks licenses and hold a new "entrepreneurs" auction for true small business ensuring that entrepreneurs have an opportunity to compete in the wireless market on a level playing field. The fact of the matter is this proposed merger request between Humpty Dumpty and T-Mobile will give two companies control of 80% of the wireless business. I ask you, how can that be good for competition? The decision the Commission must make is to deny the proposed merger between Humpty Dumpty and T- Mobile. Did you say Humpty Dumpty has no clothes on?

Read more: http://news.cnet.com/8301-30686_3-20058494-266.html#ixzz1KwkJnVdc